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10 UNITED STATES DISTRICT COURT
11
12 NORTHERN DISTRICT OF CALIFORNIA
13
14 SAN FRANCISCO DIVISION

14 WAYMO LLC,

15 Plaintiff,

16 v.

17 UBER TECHNOLOGIES, INC.;
18 OTTOMOTTO LLC; OTTO TRUCKING
LLC,

19 Defendants.

CASE NO. 3:17-cv-00939-WHA

**PLAINTIFF WAYMO LLC'S NOTICE OF
MOTION AND MOTION FOR A
PRELIMINARY INJUNCTION**

**REDACTED VERSION OF DOCUMENT
SOUGHT TO BE SEALED**

Hearing:

Date: April 27, 2017

Time: 8:00 a.m.

Place: 8, 19th Floor

Judge: The Honorable William H. Alsup

1 TO DEFENDANTS UBER TECHNOLOGIES, INC., OTTOMOTTO LLC, AND OTTO
2 TRUCKING LLC, AND THEIR COUNSEL OF RECORD:

3 PLEASE TAKE NOTICE that on April 27, 2017 at 8:00 a.m., or as soon thereafter as the
4 matter may be heard, in the courtroom of the Honorable William H. Alsup at the United States
5 District Court for the Northern District of California, 450 Golden Gate Avenue, San Francisco,
6 California, Plaintiff Waymo LLC ("Waymo") shall and hereby does move the Court for a
7 preliminary injunction prohibiting Defendants Uber Technologies, Inc. ("Uber"), Ottomotto LLC,
8 and Otto Trucking LLC (together, "Otto") (collectively, "Defendants"), from accessing, using,
9 imitating, copying, disclosing, or making available to any person or entity Waymo's Asserted
10 Trade Secrets, including but not limited to the Asserted Trade Secrets as embodied in LiDAR
11 systems that contain or are designed to operate with the printed circuit board depicted in the
12 schematic attached as Exhibit 1 to the Declaration of William Grossman or any colorable variation
13 thereof. Waymo further requests that Defendants be enjoined from making, using, selling, or
14 offering to sell devices that infringe claims 1 or 13 of United States Patent No. 8,836,922 and
15 claims 1 or 14 of U.S. Patent 9,285,464. Further, Waymo requests that Defendants be compelled
16 to return any and all Waymo confidential information in their possession or control, including the
17 14,000+ documents unlawfully taken from Waymo by Mr. Anthony Levandowski and his
18 colleagues. Alternatively, Waymo requests an expedited trial on all of the claims set out in its
19 First Amended Complaint.

20 This motion is based on this notice of motion and supporting memorandum of points and
21 authorities, the supporting declarations of Pierre-Yves Droz, Michael Janosko, Gary Brown, Tim
22 Willis, Gregory Kintz, Jordan Jaffe, and accompanying exhibits, reply briefing in further support
23 of this motion and supporting declarations and accompanying exhibits, as well as other written or
24 oral argument that Waymo may present to the Court.

25 Should expedited discovery provide good cause, Waymo respectfully reserves the right to
26 expand the scope of its preliminary injunction request.

27
28

1 DATED: March 10, 2017

QUINN EMANUEL URQUHART & SULLIVAN, LLP

2
3 By /s/ Charles K. Verhoeven

4 Charles K. Verhoeven

Attorneys for Plaintiff Waymo LLC

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1 and his related venture Otto Trucking was officially formed four days later. Otto¹ launched
 2 publicly in May 2016, and less than three months later Uber purchased the start-up — which had
 3 few assets and no marketable product — for over half a billion dollars.

4 In December 2016, Waymo was inadvertently copied on an email from one of its LiDAR
 5 component vendors, which attached machine drawings of what purports to be an Uber LiDAR
 6 circuit board. However, the circuit board bears a striking resemblance to Waymo’s own highly
 7 confidential design and reflects Waymo trade secrets — including those contained in the more
 8 than 14,000 files downloaded by Mr. Levandowski. The Uber LiDAR circuit board also indicates
 9 that Otto and Uber’s LiDAR systems infringe Waymo’s LiDAR patents.

10 On February 9, 2017 — through a public records request — Waymo learned that Otto told
 11 Nevada state regulators that it is no longer using a third-party LiDAR solution, but rather has
 12 “developed in house and/or currently deployed” an “[i]n-house custom built 64-laser” LiDAR
 13 system. As is clear from the evidence, the LiDAR technology that Uber and Otto have “developed
 14 in house and/or currently deployed” is in fact Waymo’s LiDAR technology. Defendants’
 15 statement about “deploying” this technology create an imminent threat that Defendants will use
 16 Waymo’s technology to gain a potentially irreversible edge in the new self-driving car market. To
 17 prevent Defendants from gaining a crucial market edge through the misuse of Waymo’s
 18 technology, Waymo respectfully requests a preliminary injunction.

19 **STATEMENT OF FACTS**

20 **I. WAYMO IS A LEADER IN THE SELF-DRIVING CAR INDUSTRY**

21 Google was the first major U.S. technology firm to dedicate significant resources to the
 22 development of self-driving car technology, which promises to make transportation safer, cleaner,
 23 more efficient, and more widely available. *See* Declaration of Jordan Jaffe (“Jaffe Decl.”) Exs.
 24 22-25. Google initiated its self-driving car project in 2009. *Id.* Before long, Google’s self-
 25 driving cars had navigated from the Bay Area to Los Angeles, drove the Pacific Coast Highway,
 26 and circled Lake Tahoe, logging over 140,000 miles — a first in robotics research. *Id.* Ex. 22. In

27 ¹ Collectively, OttoMotto LLC and Otto Trucking LLC are referred to herein as “Otto.”
 28

1 2014, Google unveiled its own reference vehicle, a two-door fully autonomous car without pedals
 2 or a steering wheel. *Id.* Exs. 26-28. A year later, this prototype made the first ever fully self-
 3 driving trip in normal traffic on public roads. *Id.* Exs. 29-30.

4 In 2016, Google's self-driving car program became Waymo.² *Id.* Exs. 24-25, 31-32. To
 5 date, Waymo's fleet of self-driving vehicles has logged over 2.5 million miles in autonomous
 6 mode on public roads (equating to over 300 years of human driving experience), and its systems
 7 have logged over a billion miles of simulated driving using Waymo's in-house simulator and
 8 Google's massive data centers. *Id.* Exs. 31-33.

9 Waymo's early, sustained investment in self-driving car technology has made it a leader
 10 not only in performance and safety but also in cost-reduction, a critical element for
 11 commercialization. As a result, Waymo is at the forefront of the effort to bring fully self-driving
 12 cars to market.

13 **II. WAYMO DEVELOPS ITS OWN LiDAR TECHNOLOGY FOR IMPROVED** 14 **PERFORMANCE AND REDUCED COST**

15 Laser systems known as LiDAR ("Light Detection and Ranging") provide the "vision" for
 16 autonomous vehicles. Declaration of Gregory Kintz ("Kintz Decl.") ¶ 21. LiDAR uses high-
 17 frequency, high-power pulsing lasers to measure distances between a car and external objects. *Id.*
 18 After a laser beam is fired, it reflects off the surface of surrounding objects, and data regarding the
 19 light that bounces back to designated receivers is recorded. *Id.* Software analyzes the data in
 20 order to create a three-dimensional view of the environment, which is used to identify objects,
 21 assess their motion and orientation, predict their behavior, and make driving decisions. *Id.*
 22 Waymo has invested millions of dollars and thousands of engineering hours to develop its own
 23 proprietary LiDAR systems that are high-performing and low-cost — *i.e.*, tailored to advance the
 24 commercialization of autonomous vehicles. Declaration of Pierre-Yves Droz ("Droz Decl.") ¶ 38.

27 ² Further references to "Waymo" refer to the self-driving car project from its inception in
 28 2009 to the present.

Waymo's early efforts to develop its mid-range LiDAR systems³ were directed at selecting a fundamental architecture that could provide the right balance among a variety of priorities: high resolution, compact and durable design, simple software, easy manufacture, and overall robustness. *Id.* ¶¶ 10-12. The Waymo team spent years working on a variety of possibilities —

among others. *Id.* ¶¶ 10-11. Waymo's experience with these "dead-end" designs helped lead Waymo to the architecture now at the heart of its current LiDAR systems. *Id.* ¶ 12.

In contrast to other publicly available systems, Waymo's custom and revolutionary new technology permits the use of a single lens to both transmit the laser beams used to scan the environment and receive the light reflected when those beams bounce off surrounding objects. *Id.* ¶¶ 13-16. This single-lens design was (and remains today) vastly different from commercially available LiDAR systems, including those produced by leading suppliers like Velodyne and Quanergy Systems, as well as Waymo's own previous generations of LiDAR (as described above). Prior systems had used separate lens assemblies — often with multiple lens elements — for the "transmit path" and the "receive path." *Id.* ¶¶ 14-15. Waymo's common single lens design was a game-changer over these prior designs. *Id.* ¶ 15. It reduced the size of Waymo's LiDAR by reducing the number of optical system components; it reduced the complexity of Waymo's technology by eliminating the need to painstakingly align pairs of transmit and receive lenses (with even a slight mis-calibration of a lens pair affecting the accuracy of the system); and it helped reduce the cost of the system to less than one-tenth of the cost of benchmark LiDAR systems that were on the market just a few years prior — all this, while maintaining high resolution and performance. *Id.* Waymo's custom LiDAR solutions are thus a significant

³ Autonomous vehicles must be able to "see" objects at different distances (*e.g.*, an oncoming emergency vehicle 100 meters away, a pedestrian at an intersection 10 meters away, and a curb immediately next to the car). Droz Decl. ¶ 9. Because a LiDAR system optimal for use in closer ranges will usually not be optimal for use in longer ranges, Waymo has developed mid-range and long-range LiDAR technology. *Id.* ¶¶ 9-11.

1 differentiating factor over later entrants into the self-driving space, who typically rely on the prior-
 2 art separate lens designs, with their attendant cost and manufacturing deficiencies.

3 Waymo replaced the third-party LiDAR systems it had been using for its autonomous
 4 vehicle program with its in-house single-lens system (known as “GBr2”) in [REDACTED]. *Id.* ¶ 19.
 5 Waymo now has over a dozen patents on various innovations implemented in GBr2, including the
 6 fundamental single-lens architecture described in U.S. Patent Nos. 8,836,922 and 9,285,464.
 7 Kintz Decl. ¶¶ 94-96, 135-137.

8 Waymo’s current-generation LiDAR technology, known internally as GBr3, reflects
 9 additional improvements on the single-lens design that was at the heart of GBr2. Droz Decl. ¶¶
 10 20-22. These innovations further optimize the balance among resolution, durability, size,
 11 simplicity, ease of manufacture, and cost. *Id.* ¶ 20. As just one example, Waymo implemented a
 12 specific [REDACTED] in GBr3 that [REDACTED]

13 [REDACTED] *Id.* ¶¶ 20-21. Innovations like these are not patented, are not visible to passers-by as
 14 Waymo tests its vehicles,⁴ and derive their economic value from being kept secret from
 15 competitors. *See, e.g.*, Kintz Decl. ¶¶ 28-31, 36-39, 44-45, 49-50, 54. Thus, these innovations
 16 qualify as trade secrets. Concurrently with this Motion, Waymo is submitting a List of Asserted
 17 Trade Secrets Pursuant to Cal. Civ. Proc. Code § 2019.210, detailing with particularity 121 of its
 18 trade secrets related to its LiDAR technology. Jaffe Decl., Ex. 1.

19 **III. THE UNPATENTED INNOVATIONS UNDERLYING WAYMO’S LiDAR** 20 **TECHNOLOGY ARE HEAVILY GUARDED SECRETS**

21 Unless and until it is patented, Waymo’s LiDAR technology is subject to robust measures
 22 to protect its secrecy.

23 As a condition of employment, Waymo requires all employees to enter into written
 24 agreements to maintain the confidentiality of proprietary and trade secret information. Droz Decl.
 25 ¶ 30. As a related ongoing measure, Waymo enforces an employee code of conduct that explains
 26 employees’ strict obligations to maintain the secrecy of confidential information. *Id.*

27 ⁴ Waymo’s LiDAR systems are generally contained within a housing unit that precludes an
 28 observer from viewing its internal architecture. *See* ‘922 Patent at 6:29-36; Jaffe Decl., Ex. 29.

Waymo employs network security measures and access policies that restrict the access and dissemination of confidential and proprietary trade secret information to only teams that are working on projects related to that information. Droz Decl. ¶ 32. For example, Google employees working on projects with no relation to Waymo or self-driving cars have never had access to Waymo's confidential and proprietary technical information stored on the secure SVN repository. *Id.*; Declaration of Michael Janosko ("Janosko Decl.") ¶¶ 23-25.

Waymo also employs reasonable measures to monitor and secure the networks and devices that employees use to access confidential and proprietary information. Droz Decl. ¶ 33; Janosko Decl. ¶¶ 4-25. Networks hosting such information are encrypted and require passwords for access. *Id.* ¶¶ 13-16, 25. Devices (e.g. computers, tablets, and cell phones) provided to employees are also encrypted, password protected, and subject to other security measures. *Id.* ¶¶ 5-10. Certain Waymo databases storing confidential and proprietary information, such as the SVN database (Waymo's confidential design server), are available on a need to know basis only and require special software to access. *Id.* ¶ 25; Droz Decl. ¶ 32.

Waymo takes reasonable measures to mark confidential and proprietary information, such as documents and other materials, with visible legends designating them as such. *Id.* ¶ 34; Declaration of Tim Willis ("Willis Decl.") ¶ 4. Waymo employs reasonable efforts to secure physical facilities by restricting access and employing locks, cameras, guards, and other security measures. Droz Decl. ¶ 35; Janosko Decl. ¶ 22.

Waymo also strictly requires all consultants, vendors, and manufacturers to sign confidentiality agreements that require that they undertake reasonable efforts to maintain, and not to disclose, any confidential or trade secret information. Willis Decl. ¶¶ 4-5. Each outside vendor or manufacturer that has received Waymo's LiDAR-related confidential and proprietary trade secret information has executed at least one written non-disclosure agreement. *Id.*

IV. UBER IS LATE TO ENTER THE SELF-DRIVING CAR MARKET

Uber came to view its entry into the self-driving car space as an "existential" imperative when it saw Waymo's successful self-driving car efforts. Jaffe Decl. Ex. 35. But whereas Waymo began developing its self-driving cars in 2009, Uber's first serious foray into automation was not

1 until six years later when — in February 2015 — Uber announced a partnership with Carnegie
 2 Mellon University. *Id.* Exs. 36-37. According to public reports of the partnership, Uber hired at
 3 least 40 CMU faculty members, researchers, and technicians, including the former head of CMU’s
 4 National Robotics Engineering Center, to help jump-start an Uber vehicle automation program.
 5 *Id.*

6 By early 2016, Uber had invested significant sums in the team from Carnegie Mellon, but
 7 the research and development process was slow. *Id.* Ex. 37. And with respect to LiDAR
 8 technology, Uber’s program appeared to rely solely on a third-party, off-the-shelf LiDAR system
 9 manufactured by Velodyne Inc. (the HDL-64E). *Compare id.* Ex. 38 (product page for
 10 Velodyne’s HDL-64E with photo) *with* Ex. 39 (August 2016 article with photo of Uber LiDAR).

11 Uber’s stalled program did not make any significant advances toward designing or
 12 manufacturing its own LiDAR technology for improved performance or lower cost. *Id.* Ex. 37.
 13 As of mid-2016, Uber remained years behind in the race to develop vehicle automation technology
 14 suitable for the mass market.

15 **V. WHILE AT WAYMO, ANTHONY LEVANDOWSKI AND OTHER WAYMO**
 16 **EMPLOYEES SECRETLY DOWNLOAD THOUSANDS OF CONFIDENTIAL**
 17 **FILES BEFORE LEAVING FOR OTTO**

18 Unbeknownst to Waymo at the time, by late 2015, Waymo manager Anthony
 19 Levandowski was secretly preparing to launch a competing vehicle automation venture — a
 20 company named “280 Systems,” which later would become Otto. In November 2015, an Internet
 21 domain name was registered for 280 Systems. Jaffe Decl. Ex. 40. On December 3, 2015, Mr.
 22 Levandowski searched for instructions on how to access the SVN database, Waymo’s highly
 23 confidential design server. Declaration of Gary Brown (“Brown Decl.”) ¶ 15. This server holds
 24 detailed technical information related to Waymo’s LiDAR systems, including the blueprints for its
 25 key hardware components, and is accessible only on a need-to-know basis. Janosko Decl. ¶¶ 23-
 26 25; Droz Decl. ¶ 32.

26 On December 11, 2015, Mr. Levandowski – who had a total of three Waymo-issued
 27 computers – installed special software on a Waymo laptop to access the design server. Brown
 28 Decl. ¶ 16. Until shortly before installing the software, Mr. Levandowski had used this particular

1 laptop only a handful of times in the previous eight months. *Id.* ¶ 13. On that same day,
2 December 11, 2015, Mr. Levandowski then downloaded over 14,000 proprietary files from that
3 server. *Id.* ¶ 17. Mr. Levandowski’s download included 9.7 GBs of sensitive, secret, and valuable
4 internal Waymo information. *Id.*; Janosko Decl. ¶¶ 23-25. 2 GBs of the download related to
5 Waymo’s LiDAR technology. *Id.* ¶ 24. Among the downloaded documents were confidential
6 specifications for each version of every generation of Waymo’s LiDAR circuit boards. Droz Decl.
7 ¶ 24; Kintz Decl. ¶ 25. On December 14, Mr. Levandowski attached a removable media device
8 (an SD Card) to the laptop containing the downloaded files for approximately eight hours. Brown
9 Decl. ¶ 18.

10 On December 18, seven days after Mr. Levandowski completed his download of
11 confidential Waymo information and four days after he removed the SD Card, he reformatted the
12 laptop, attempting to erase any evidence of what happened to the downloaded files. *Id.* ¶ 19.
13 After wiping the laptop clean, Mr. Levandowski used the reformatted laptop for a few minutes and
14 then never used it again. *Id.* ¶¶ 19-20.

15 On January 4, 2016, Mr. Levandowski used his Waymo credentials and security clearances
16 to download additional confidential Waymo documents to a personal device (as opposed to
17 viewing documents online, as is typical for Waymo employees). *Id.* ¶ 22. These downloaded
18 materials included at least five highly sensitive internal presentations containing proprietary
19 technical details regarding the manufacture, assembly, calibration, and testing of Waymo’s LiDAR
20 sensors. *Id.*; Droz Decl. ¶¶ 25-26 & Exs. A-B, D-F. At around the same time, Mr. Levandowski
21 confided in some Waymo colleagues that he planned to “replicate” Waymo’s technology at a
22 Waymo competitor. *Id.* ¶ 27.

23 In mid-January, Mr. Levandowski was spotted at Uber’s headquarters in San Francisco,
24 attending meetings with high-level Uber executives. *Id.* ¶ 29. On January 15, Mr. Levandowski’s
25 venture 280 Systems — which became OttoMotto LLC — was officially formed (though it
26 remained in stealth mode for several months). Jaffe Decl. Ex. 41. On January 27, Mr.
27 Levandowski resigned from Waymo without notice. And on February 1, Mr. Levandowski’s
28

1 venture Otto Trucking was officially formed (also remaining in stealth mode for several months).
2 *Id.* Ex. 42.

3 Other Waymo employees would later download additional confidential documents
4 immediately prior to resigning from Waymo and joining Otto. Brown Decl. ¶¶ 24-29; Willis Decl.
5 ¶¶ 6-11.

6 **VI. UBER ACQUIRES OTTO, AFTER ONLY SIX MONTHS OF OFFICIAL**
7 **EXISTENCE, FOR OVER HALF A BILLION DOLLARS**

8 In July 2016, after just six months of existence, Uber inked a deal to acquire Otto. Jaffe
9 Decl. Exs. 43-45. As *Forbes* reported at the time, “one of the keys to this acquisition[] could be
10 the LIDAR system that was developed in-house at Otto.” *Id.* Ex. 44.

11 Otto’s purchase price was reported as \$680 million, the payment of which is reportedly
12 contingent on Otto meeting various technical milestones and — ultimately — getting self-driving
13 Uber cars deployed. *Id.* Ex. 46. In recognition of the central role of Otto’s technology within
14 Uber, Uber named Otto co-founder Mr. Levandowski as its vice president in charge of Uber’s self-
15 driving car project. *Id.* Ex. 47. Uber rechristened Otto’s existing San Francisco office as Uber’s
16 new self-driving research and development center. *Id.* Ex. 43.

17 The sudden resignations from Waymo, Otto’s quick path from formation to public launch
18 with Mr. Levandowski at the helm, and Uber’s near-immediate acquisition of Otto for more than
19 half a billion dollars all raised suspicions at Waymo regarding possible misuse of its intellectual
20 property. Accordingly, in the summer of 2016, Waymo began to investigate the events
21 surrounding the departure of Waymo employees for Otto and ultimately discovered Mr.
22 Levandowski’s 14,000-document download, his efforts to hide the disposition of those documents,
23 and the downloading of other Waymo confidential materials by Mr. Levandowski and other
24 former Waymo employees. Brown Decl. ¶¶ 12-29.

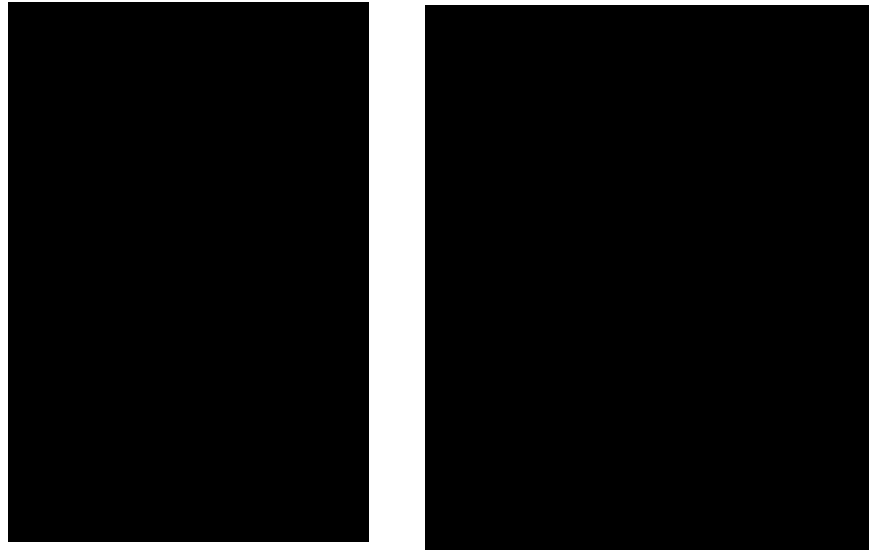
25 Though Waymo found evidence that Mr. Levandowski and others had downloaded
26 Waymo’s confidential materials in a suspicious manner, Waymo did not yet have evidence that its
27 secret intellectual property was actually being acquired for use by another party, much less used
28

1 for any imminent product launch in the self-driving car market. Such evidence, however, would
 2 soon be forthcoming.

3 **VII. WAYMO OBTAINS PROOF THAT DEFENDANTS ARE ACTUALLY USING ITS**
 4 **INTELLECTUAL PROPERTY**

5 One of Waymo's LiDAR component vendors is Gorilla Circuits ("Gorilla"). On
 6 December 13, 2016, a Waymo employee received an email from a Gorilla employee, entitled "RE:
 7 OTTO FILES." Declaration of William Grossman ("Grossman Decl."), Ex. 1. The email's
 8 recipients included the email alias Uber@gorillacircuits.com — seemingly indicating that the
 9 thread was a discussion among members of Gorilla's "Uber" team. *Id.* Attached to the email
 10 was a machine drawing of what purported to be an Otto printed circuit board (the "Replicated
 11 Board") that bore a striking resemblance to — and shared several unique characteristics with —
 12 Waymo's highly confidential current-generation GBr3 [REDACTED] circuit boards, the design of
 13 which had been among the more than 14,000 files downloaded by Mr. Levandowski before his
 14 resignation. *Id.*, Kintz Decl. ¶¶ 25, 47.

15 Indeed, in all key respects, the Replicated Board is indistinguishable from Board [REDACTED] in
 16 Waymo's current-generation GBr3 LiDAR systems:



25 *Id.* ¶¶ 26, 32-34, 40-42, 46-48, 51-52, 55.

26 [REDACTED]
 27 [REDACTED]
 28 [REDACTED]

1 [REDACTED]. *Id.* ¶¶ 32-34. This particular [REDACTED] design was the result of months of Waymo
2 research to [REDACTED]

3 [REDACTED]. *Id.* ¶¶ 29-31. Waymo implemented it for the first time in its GBr3 system, and
4 it has not been disclosed to the public. *Id.*

5 [REDACTED]
6 [REDACTED] *Id.* ¶¶ 51-52. Such a design is [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]

10 [REDACTED]. *Id.* ¶¶ 49-50.

11 The Replicated Board contains [REDACTED]. *Id.* ¶¶ 40-42.
12 Waymo began using [REDACTED] in its GBr3 system, when Waymo moved away
13 from [REDACTED]
14 [REDACTED]

15 [REDACTED] *Id.* ¶¶ 36-38. [REDACTED] configuration was the result of Waymo's work to balance goals related to
16 [REDACTED] and it has not been disclosed to the public. *Id.* Moreover, the [REDACTED]
17 [REDACTED] provided with the Replicated Board reveal that Defendants are using
18 Waymo's proprietary manufacturing techniques to [REDACTED]
19 [REDACTED] *Id.* ¶¶ 54-55.

20 All told, the Replicated Board is simply a scaled [REDACTED] copy of a Waymo PCB that
21 was highly engineered based on extensive research and testing and designed particularly for use in
22 Waymo's single-lens LiDAR architecture. *Id.* ¶¶ 44-48.

23 **VIII. WAYMO OBTAINS EVIDENCE THAT DEFENDANTS ARE USING WAYMO'S** 24 **INTELLECTUAL PROPERTY FOR AN IMMINENT PRODUCT LAUNCH**

25 On February 3, 2017, aware that Defendants were pre-testing or testing self-driving cars in
26 Nevada, Waymo filed a public records request with the Nevada Governor's Office of Economic
27 Development and Department of Motor Vehicles. Jaffe Decl. Ex. 51. Among the documents that
28 Waymo received on February 9 in response to that request was a submission in which Otto

1 represented that it had “developed in house and/or currently deployed” an “[i]n-house custom built
2 64-laser” LiDAR system. *Id.* Ex. 52 at 59-60. In other words, Defendants were using Waymo’s
3 intellectual property for an imminent product launch — an actual “deploy[ment]” of its stolen
4 LiDAR technology in the self-driving market.

5 Since Waymo filed its Complaint in this action, Forbes published the following statement
6 by Mr. Levandowski: “How did we get to where we are? We understand what not to do and
7 where not to waste time because we have experience from having tried it before and it didn’t
8 work. *And we have experience in trying things that do work, so we are just doing the things*
9 *that do work and focus on that.*” Jaffe Decl. Ex. 53. Defendants are now deploying technology
10 that replicates “the things that do work” — *i.e.*, Waymo’s intellectual property.

11 **ARGUMENT**

12 To obtain a preliminary injunction, Waymo “must establish that it is likely to succeed on
13 the merits, that it is likely to suffer irreparable harm in the absence of preliminary relief, that the
14 balance of equities tips in its favor, and that an injunction is in the public interest.” *AstraZeneca*
15 *LP v. Apotex Corp.*, 633 F.3d 1042, 1049 (Fed. Cir. 2010) (alterations omitted) (quoting *Winter v.*
16 *Natural Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008)). As explained below and in the
17 accompanying declarations, Defendants’ theft of Waymo’s trade secrets and infringement of
18 Waymo’s patents easily meets this standard. Accordingly, Waymo is entitled to a preliminary
19 injunction.

20 **I. WAYMO IS LIKELY TO SUCCEED ON THE MERITS OF ITS CLAIMS**

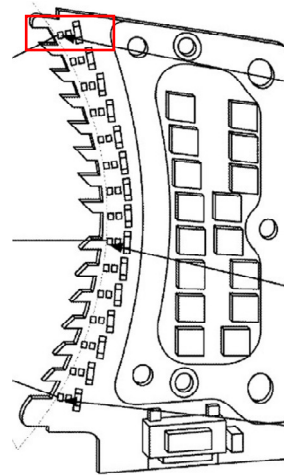
21 **A. Waymo Is Likely To Succeed On Its Trade Secret Claims**

22 In order to prevail on its claims under the California Uniform Trade Secrets Act and the
23 Defend Trade Secrets Act, Waymo need only show that Defendants acquired Waymo’s trade
24 secrets with reason to know that the trade secrets were acquired by improper means. Cal. Civ.
25 Code § 3426; 18 U.S.C. § 1836. There can be no viable dispute on this point: Mr. Levandowski
26 improperly downloaded thousands of Waymo’s confidential and proprietary LiDAR documents
27 while he was setting up his competing venture and meeting with Uber executives. Statement of
28 Facts § V, *supra*.

But it is not just Defendants' *acquisition* of Waymo's trade secrets that makes a preliminary injunction particularly warranted here; it is also Defendants' *use* of those trade secrets in a system that is apparently now fully developed and being deployed (or about to be deployed) in self-driving vehicles.

Asserted Trade Secrets 1 and 4⁵:

Waymo's prior LIDAR generation, GBr2, Kintz Decl. ¶ 31; Droz Decl. ¶ 20. This prior design is shown, for example, in the '922 patent, which was originally filed in 2013. However, a key breakthrough made for the current-generation GBr3 design was



'922 Fig. 4

Kintz Decl. ¶ 31; Droz Decl. ¶ 21.

of the GBr2 design had. Kintz Decl. ¶ 31. After deploying the GBr2 design, Waymo determined, using its own confidential data and testing,

⁵ All of the trade secrets discussed in this Section are examples from Waymo's List of Asserted Trade Secrets Pursuant to Cal. Civ. Proc. Code § 2019.210, filed herewith as Exhibit 1 to the Declaration of Jordan Jaffe. This List details, with particularity, 121 Waymo trade secrets.

1 Droz Decl. ¶¶ 20-21. For example, Waymo discovered that [REDACTED]
 2 [REDACTED] *Id.* ¶ 21.
 3 At the same time, the GBr2 [REDACTED]
 4 [REDACTED]. *Id.* Waymo
 5 engineers had the key insight to [REDACTED]
 6 [REDACTED] *Id.* ¶ 21. Using this information and
 7 insight, Waymo was able to come up with a design that [REDACTED]
 8 [REDACTED]
 9 [REDACTED]
 10 [REDACTED] *Id.*
 11 The LiDAR team then spent months [REDACTED]
 12 [REDACTED] For example, arriving
 13 at Waymo's design required [REDACTED]
 14 [REDACTED]
 15 [REDACTED]
 16 [REDACTED]
 17 [REDACTED] *Id.* ¶ 22. The end result was the [REDACTED] design used in GBr3.
 18 The Replicated Board copies this [REDACTED] design. Kintz Decl. ¶¶ 32-34.
 19 **Asserted Trade Secret 7:** [REDACTED]
 20 [REDACTED] For GBr3, Waymo also came up with an innovation related to [REDACTED]
 21 [REDACTED] Jaffe Decl. Ex. 2 at 15.
 22 Typical LiDAR systems [REDACTED]
 23 [REDACTED] Kintz Decl. ¶ 49. But with GBr3, Waymo created a design that
 24 [REDACTED]. *Id.* ¶ 50. This approach ensures that
 25 [REDACTED]
 26 [REDACTED]. *Id.* The
 27 Replicated Board copies Waymo's [REDACTED] design. *Id.*
 28

Asserted Trade Secrets 2 and 3: [REDACTED]

[REDACTED] GBr2 contained [REDACTED] Jaffe Decl. Ex. 3 at 4. GBr3, however, took a new approach, which was designed after hundreds of hours of research and testing. Droz Decl. ¶ 20. Instead of [REDACTED] [REDACTED] [REDACTED] Jaffe Decl., Ex. 2 at 17. The evolution of Waymo's configuration, departing from the standard practice of [REDACTED] [REDACTED] [REDACTED] [REDACTED] Kintz Decl. ¶ 41. The Replicated Board contains [REDACTED] (id. ¶ 40); the most logical conclusion is that the Replicated Board is [REDACTED] [REDACTED] Id. ¶¶ 40-42. Indeed, the Replicated Board appears to be a copy of Waymo's Board [REDACTED] Id. ¶¶ 46-48.

Asserted Trade Secret 14: [REDACTED]

[REDACTED] In addition to [REDACTED] [REDACTED] is critical to the GBr3 design. Id. ¶ 54. However, [REDACTED] [REDACTED] Id. To solve this problem, Waymo developed a proprietary technique of [REDACTED] [REDACTED] Id. ¶ 54. The email attaching the schematic of the Replicated Board and circulated among the Uber team at Gorilla [REDACTED] [REDACTED] Grossman Decl. Ex. 1 at 4. This statement, combined with the circulated specifications for the Replicated Board – [REDACTED] – demonstrate that the Replicated Board is manufactured by copying Waymo's

1 technique for [REDACTED]

2 [REDACTED] Kintz Decl. ¶ 55.

3 **B. Waymo Is Likely To Succeed On Its Patent Infringement Claims**

4 While Defendants' misappropriation of these trade secrets is apparent from the Replicated
5 Board itself, the board is one part of a larger LiDAR device and thus interacts with a host of other
6 components — including other boards, lenses, and transmit and receive components — in order to
7 function properly. In this context, the Replicated Board as part of the entire LiDAR device
8 “deployed” by Defendants reads on the fundamental common lens design patents granted to
9 Waymo.

10 Waymo developed the GBr3 specifically to interface with components in the design
11 covered by U.S. Patent Nos. 8,836,922 (“the '922 Patent”) and 9,285,464 (“the '464 Patent”), and
12 Mr. Levandowski downloaded confidential documentation related to all aspects of that design.
13 Mr. Levandowski and his team are well aware of these specific patents. He and some of his
14 colleagues were named inventors on them when they developed the pioneering common lens
15 design at Waymo.

16 The '922 Patent teaches an optical configuration that uses a common lens to both transmit
17 and receive light beams, rather than using separate lenses for transmission and receipt. '922
18 Patent at 4:5-11; Kintz Decl. ¶ 56. One of GBr's innovations was this common-lens design to
19 both transmit and receive the collection of laser beams used to scan the surrounding environment.
20 Droz Decl. ¶ 13.

21 Traditionally, a LiDAR system used lens assemblies with multiple elements, such as 3 lens
22 elements (a triplet lens) for transmit side and another triplet lens for the receive side. *Id.* ¶ 14. But
23 this approach was not practical in a LiDAR system meant for self-driving cars because the size
24 and cost of the system would be very large due to the complexity of manufacturing numerous
25 complex lens elements. *Id.* Thus, one of Waymo's key insights was that using one lens for both
26 transmitting and receiving is simpler and allows for a smaller and less expensive LiDAR unit. *Id.*
27 ¶ 15. Using one lens better ensures that focal lengths are equal for both sending laser beams out
28

(transmit side) and for receiving reflected light back (receive side) so that the transmit and receive arrays can match perfectly. *Id.*

While offering important savings in cost, performance, and complexity, a common-lens design poses problems that must be solved. *Id.* For example, using a single lens makes the focal plane curved like a bowl rather than flat like a pancake, but Waymo developed a curved transmit board to echo the curved focal plane. *Id.* Waymo's ingenuity enabled it to get the small-size and low-cost benefits of a single-lens system.

According to the '922 patent on Waymo's single-lens design, the common lens is mounted to a housing. '922 Patent at 1:50-51; Kintz Decl. ¶ 56. Within the housing, a transmit block emits light to the lens via an exit aperture in a wall that includes a reflective surface. '922 Patent at 3:61-67, 4:37-39; Kintz Decl. ¶ 56. The wall shields the light from the transmit block from blinding the detectors, but a narrow exit aperture is necessary to allow the light to exit the lens into the surrounding environment, as required for the LiDAR device to function. When that light returns after reflecting off an object in the surrounding environment, it returns into the housing in the same direction that it exited, *i.e.*, it travels towards the wall containing the exit aperture. Because the surface of the wall that faces the lens is reflective, the wall is able to direct the returning object-reflected light towards the receive block, which measures the time-of-flight of the laser beam to calculate object distance. '922 Patent at 4:26-39; Kintz Decl. ¶ 56.

The architecture of the Replicated Board (including its curved edge and other design elements) shows that the Accused LiDAR Device is designed to interface with a common-lens design that would meet every element of at least claim 1 of the '922 Patent. *Id.* ¶¶ 65-74. In brief, Waymo is likely to show infringement of at least '922 claim 1, which claims a LiDAR device comprising:

a lens mounted to a housing, wherein the housing is configured to rotate about an axis and has an interior space that includes a transmit block, a receive block, a transmit path, and a receive path, wherein the transmit block has an exit aperture in a wall that comprises a reflective surface, wherein the receive block has an entrance aperture, wherein the transmit path

This claim limitation describes the optical configuration claimed by the patent — a configuration by which a common lens handles transmitting and receiving, and by which the light travels through an exit aperture in a wall, which wall doubles as a reflector for returning object-reflected light. Given the layout of the Replicated Board [REDACTED]

1 2 3 4 5	extends from the exit aperture to the lens, and wherein the receive path extends from the lens to the entrance aperture via the reflective surface;	██████████ indicate that the Replicated Board is part of the Accused LiDAR Device's common-lens system. Further, other characteristics of the Replicated Board indicate that it is designed to project its laser beams towards the claimed exit aperture within a wall with a reflective surface. Kintz Decl. ¶¶ 63-78.
6 7 8 9	a plurality of light sources in the transmit block, wherein the plurality of light sources are configured to emit a plurality of light beams through the exit aperture in a plurality of different directions, the light beams comprising light having wavelengths in a wavelength range;	The Accused LiDAR Device's Replicated Board contains ██████████ ██████████ ██████████ <i>Id.</i> ¶ 81. The Replicated Board uses ██████████ ██████████ <i>Id.</i> ¶¶ 80-82.
10 11 12 13 14 15	a plurality of detectors in the receive block, wherein the plurality of detectors are configured to detect light having wavelengths in the wavelength range; and	The Replicated Board necessarily corresponds to a plurality of detectors in the receive block of the Accused LiDAR Device, because if there were only one detector, the Accused LiDAR Device would be unable to emit 6.4 million beams per second, as claimed by Defendants. The detectors will be configured to detect the light emitted by ██████████ because otherwise the LiDAR device could not function. <i>Id.</i> ¶¶ 83-85.
16 17 18 19 20 21	wherein the lens is configured to receive the light beams via the transmit path, collimate the light beams for transmission into an environment of the LIDAR device, collect light comprising light from one or more of the collimated light beams reflected by one or more objects in the environment of the LIDAR device, and focus the collected light onto the detectors via the receive path.	As described above, the Replicated Board is part of the Accused LiDAR Device, which uses a common lens to receive the outgoing light on the transmit path and to collect returning light that has reflected off external objects. Furthermore, all LiDAR transmit lenses collimate light for transmission, and all LiDAR receive lenses focus collected light onto detectors; the common lens necessarily follows these basic properties. <i>Id.</i> ¶¶ 86-87.

22
23 A more detailed infringement analysis for claim 1 and 13 is set forth in the attached
24 Declaration of Gregory Kintz, an expert in optical designs who has designed LiDAR and other
25 laser systems for the U.S. Navy and Lockheed Martin. *See id.* at ¶¶ 60-89.

26 Mr. Kintz further explains how the '922 claims are valid, since their configuration of
27 elements — including the single lens, housing with transmit/receive blocks, and transmit path —
28 “was a departure from the LiDAR devices in existence at the time. The invention made advances

1 in size, cost, and complexity, and would not have been obvious to a person of ordinary skill in the
 2 art. There are LiDAR systems in prior art, but none achieve the benefits enabled by the elegant
 3 configuration disclosed by the '922 Patent.” *Id.* at ¶¶ 90-93.

4 The '464 Patent is a continuation of the '922 Patent and shares its specification and
 5 figures. Claim 1 of the '464 Patent is identical to claim 1 of the '922 Patent except that the first
 6 element is slightly worded differently:

7 **'922 Patent**

8 a lens mounted to a housing, wherein the
 9 housing is configured to rotate about an axis
 10 and has an interior space that includes a
 11 transmit block, a receive block, a transmit path,
 12 and a receive path, wherein the transmit block
 13 has an exit aperture **in a wall that comprises a
 14 reflective surface**, wherein the receive block
 has an entrance aperture, wherein the transmit
 path extends from the exit aperture to the lens,
 and wherein the receive path extends from the
 lens to the entrance aperture **via the reflective
 surface**;

7 **'464 Patent**

8 a lens mounted to a housing, wherein the
 9 housing is configured to rotate about an axis
 10 and has an interior space that includes a
 11 transmit block, a receive block, a transmit path,
 12 and a receive path, wherein the transmit block
 13 has an exit aperture, wherein the receive block
 14 has an entrance aperture, wherein the transmit
 path extends from the exit aperture to the lens,
 wherein the receive path extends from the lens
 to the entrance aperture, **and wherein the
 transmit path at least partially overlaps the
 receive path in the interior space between the
 transmit block and the receive block**;

15
 16 While both patents claim a common-lens system, the '464 Patent does not specifically
 17 require that the exit aperture exist within a wall that doubles as a mirror on the receive path.
 18 Rather, it requires that the transmit path overlap the receive path within the shared interior space.
 19 Thus, while the '464 Patent is slightly different than the '922 Patent, the Accused LIDAR Device
 20 infringes claims 1 and 14 of the '464 Patent for the same reasons it infringes claims 1 and 13 of
 21 the '922 Patent. Kintz Decl. at ¶¶ 101-30. Mr. Kintz has also explained that the '464 patent is
 22 valid. *Id.* at ¶ 131-34.

23 * * *

24 While Defendants' misappropriation of certain trade secrets and infringement of certain
 25 patents is apparent from Waymo's inadvertent receipt of the Replicated Board and the limited
 26 public information that Waymo has been able to obtain, Waymo strongly suspects that this is only
 27 the tip of the proverbial iceberg. Expedited discovery is likely to show that Defendants have
 28 misappropriated additional trade secrets and infringed additional Waymo patents. Thus, as

1 detailed in Waymo's Motion for Expedited Discovery (filed herewith), Waymo respectfully
 2 requests that expedited discovery be granted, and Waymo reserves the right to amend this Motion
 3 should expedited discovery provide further details about additional trade secret misappropriation
 4 and patent infringement.

5 **II. WAYMO WILL SUFFER IRREPARABLE HARM WITHOUT AN INJUNCTION**

6 Numerous courts in this District have held that threatened or continued use of another
 7 party's trade secrets generally creates irreparable harm. *See, e.g., Gallagher Benefits Servs., Inc.*
 8 *v. De La Torre*, No. C 07-5495 VRW, 2007 WL 4106821, at *5 (N.D. Cal. Nov. 16, 2007) ("In
 9 general, the imminent use of a trade secret constitutes irreparable harm."); *aff'd in relevant part*,
 10 283 F. App'x 543 (9th Cir. 2008); *see also Western Directories, Inc. v. Golden Guide Directories,*
 11 *Inc.*, No. C 09-1625 CW, 2009 WL 1625945, *6 (N.D. Cal. June 8, 2009) ("The Court presumes
 12 that Plaintiff will suffer irreparable harm if its proprietary information is misappropriated."); *Vinyl*
 13 *Interactive, LLC v. Guarino*, No. C 09-0987 CW, 2009 WL 1228695, at *8 (N.D. Cal. May 1,
 14 2009) (same); *Teleflora, LLC v. Florists' Transworld Delivery, Inc.*, No. C 03-05858 JW, 2004
 15 WL 1844847, at *6 (N.D. Cal. Aug. 18, 2004) ("Use or disclosure of trade secrets is an irreparable
 16 harm which will support the granting of a preliminary injunction.") Courts in other districts have
 17 reached similar conclusions. *See, e.g., Advanced Instructional Sys., Inc. v. Competentum USA,*
 18 *Ltd.*, No. 1:15CV858, 2015 WL 7575925, at *4 (M.D. N.C. Nov. 25, 2015) ("In most instances,
 19 courts presume irreparable harm when a trade secret has been misappropriated."); *Pixon Imaging,*
 20 *Inc. v. Empower Techs. Corp.*, No. 11-CV-1093-JM MDD, 2011 WL 3739529, at *6 (S.D. Cal.
 21 Aug. 24, 2011) ("[A]n intention to make imminent or continued use of a trade secret or to
 22 disclose it to a competitor will almost always show irreparable harm.")

23 The usual rule applies forcefully in this case. Specifically, Defendants' continued use of
 24 Waymo's trade secrets to unfairly compete with Waymo in the nascent self-driving car industry
 25 would cause irreparable harm to Waymo. After all, this nascent industry includes several fierce
 26 competitors who are racing to become the first to offer a full suite of commercial self-driving
 27 services and thus gain a critical first-mover advantage. *See, e.g.,* Adrienne LaFrance, "The High-
 28 Stakes Race to Rid the World of Human Drivers," *The Atlantic* (Dec. 1, 2015) (noting that ("[t]he

1 race to bring driverless cars to the masses is only just beginning, but already it is a fight for the
 2 ages Aspects of this race evoke several pivotal moments in technological history: the
 3 construction of railroads, the dawn of electric light, the birth of the automobile, the beginning of
 4 aviation.”) It naturally follows that Waymo would be irreparably harmed if Defendants were
 5 allowed to use Waymo’s own trade secrets to gain a critical edge in this race. *Lamb-Weston, Inc.*
 6 *v. McCain Foods, Ltd.*, 941 F.2d 970, 974 (9th Cir. 1991) (“An injunction in a trade secret case
 7 seeks to protect the secrecy of misappropriated information and to eliminate any unfair head start
 8 the defendant may have gained.”); *Netlist Inc v. Diablo Techs. Inc.*, No. 13-CV-05962-YGR, 2015
 9 WL 153724, at *8 (N.D. Cal. Jan. 12, 2015) (“The Court finds that the showing of a head-start
 10 advantage to Diablo, based upon an improper use of Netlist’s technology, is sufficient to establish
 11 that any harm to Netlist would not be remedied by money damages alone.”). Uber’s own CEO
 12 Travis Kalanick recently explained the irreparable effects that will result from whichever company
 13 wins the race to first commercialize self-driving cars, stating: “If we are not tied for first, then the
 14 person who is in first, or the entity that’s in first, then rolls out a ride-sharing network that is far
 15 cheaper or far higher-quality than Uber’s, then Uber is no longer a thing.” Biz Carson, “Uber
 16 CEO Travis Kalanick on Uber’s Bet on Self-Driving Cars: ‘I Can’t Be Wrong’”, *Business Insider*
 17 (Aug. 18, 2016). Jaffe Decl. Ex. 35.

18 Waymo would also be irreparably harmed because Defendants’ continued use of Waymo’s
 19 trade secrets is likely to result in further *disclosure* of those trade secrets. As explained in
 20 Statement of Facts Section VIII, *supra*, Defendants have already begun making regulatory filings
 21 that reference Waymo’s trade secrets. If Defendants continue using Waymo’s trade secrets in
 22 their self-driving car endeavors, there would likely be additional filings disclosing other aspects of
 23 Waymo’s trade secrets. Furthermore, Defendants’ disrespectful treatment of Waymo’s trade
 24 secrets — as shown by Defendants’ willingness to capitalize on their outright theft — leaves little
 25 doubt that Defendants would not hesitate to throw Waymo’s trade secrets open to the general
 26 public if Defendants decided that it suited their purposes. Improper disclosure of trade secrets is,
 27 of course, a classic irreparable injury because such disclosure destroys the trade secret altogether.

1 *Saini v. Int'l Game Tech.*, 434 F. Supp. 2d 913, 919 (D. Nev. 2006) (“Public disclosure of a trade
2 secret destroys the information’s status as a trade secret.”)

3 A similar analysis applies to Defendants’ patent infringement, which — if left unchecked
4 — will inflict many of the same irreparable harms as Defendants’ trade secret misappropriation.
5 For example, like Defendants’ continued trade secret misappropriation, Defendants’ continued
6 patent infringement would give Defendants an unfair advantage in the high-stakes race to offer
7 commercial self-driving services. Were Waymo to lose the race to successfully commercialize
8 this nascent field, the harm would be irreparable. This Court reached a similar conclusion last Fall
9 in the *Illumina, Inc. v. Qiagen N.V.* case, finding irreparable harm where “[t]he market for DNA
10 sequencing in clinical laboratories is expected to grow substantially in the near future Now,
11 as the doors to the market have swung open, Qiagen seeks to usurp Illumina’s position in that
12 market with pirated technology.” *Illumina, Inc. v. Qiagen, N.V.*, -- F.Supp. 3d --, 2016 WL
13 4719269, at *10 (N.D. Cal. Sept. 9, 2016) (Alsup, J.) Other courts have likewise found irreparable
14 harm when a defendant’s patent infringement allows the defendant to gain a competitive edge in a
15 nascent or fast-growing market. *See Visto Corp. v. Sproqit Techs., Inc.*, 413 F. Supp. 2d 1073,
16 1092 (N.D. Cal. 2006) (finding irreparable harm when patentee and infringer were direct
17 competitors fighting for market share in a rapidly changing market); *Transocean Offshore*
18 *Deepwater Drilling, Inc. v. GlobalSantaFe Corp.*, No. H-03-2910, 2006 WL 3813778, at *4 (S.D.
19 Tex. Dec. 27, 2006) (finding irreparable harm because the infringer would steal sales and market
20 share in a “developing market”); *Power-One, Inc. v. Artesyn Tech., Inc.*, No. 2:05-CV-463, 2008
21 WL 1746636, at *1 n.1 (E.D. Tex. Apr. 11, 2008) (finding irreparable harm where the patentee
22 and infringer were direct competitors, and the relevant market had been “recently created”).

23 To be sure, when a patentee claims irreparable harm from lost sales or market share in an
24 existing market, it must show “‘some connection’ between the patented features and the demand
25 for [the infringing] products.” *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 642 (Fed. Cir.
26 2015) (“*Apple IV*”). This is often called the “causal nexus” requirement. Here, there is a clear
27 causal nexus between Defendants’ patent infringement and the harm resulting from Defendants’
28 unfair head-start in the race to commercialize self-driving cars. This is because the Waymo

1 patents at issue in this motion — the '922 Patent and the '464 Patent — cover core technical
 2 features that enable a LiDAR system to meet the challenges of the self-driving environment. More
 3 specifically, these patents cover a single-lens configuration that offers great advantages in size,
 4 cost, and complexity compared with prior LiDAR configurations. It would be much more difficult
 5 to successfully launch a self-driving car without this patented technology. *See, e.g.*, Kintz Decl. ¶¶
 6 39, 44. Indeed, as explained above, the single-lens architecture reduces costs by an order of
 7 magnitude over prior art multi-lens architectures. Statement of Facts § II, *supra*. Thus, adopting
 8 this infringing architecture gives Defendants a huge unearned cost advantage in their efforts to win
 9 the race to launch a commercially-viable self-driving car.

10 **III. THE BALANCE OF HARDSHIPS STRONGLY FAVORS AN INJUNCTION**

11 The balance of hardships strongly favors a preliminary injunction, on both the trade secret
 12 claim and the patent claims. On the trade secret claim, it should be noted that Waymo is not
 13 seeking to enjoin Defendants from pursuing self-driving car projects *in toto*. Waymo merely asks
 14 that Defendants not be allowed to use Waymo's trade secrets in doing so. Given that Defendants
 15 have no right to use Waymo's trade secrets at all, they would suffer no legally-cognizable hardship
 16 from being forced to abandon Waymo's trade secrets in their self-driving endeavors. Conversely,
 17 Waymo would be greatly harmed if its own trade secrets were used against it in the race to
 18 commercialize self-driving technology. Thus, the balance of hardships strongly favors Waymo.
 19 *See, e.g., TMX Funding, Inc. v. Impero Techs., Inc.*, No. C 10-00202 JF (PVT), 2010 WL
 20 1028254, at *8 (N.D. Cal. Mar. 18, 2010) ("The injunctive relief sought by TMX is specific to the
 21 use of proprietary information belonging to TMX Accordingly, the balance of hardships
 22 weighs in favor of TMX.") *Farmers Ins. Exch. v. Steele Ins. Agency, Inc.*, No. 2:13-CV-00784-
 23 MCE, 2013 WL 2151553, at *14 (E.D. Cal. May 16, 2013) ("Courts have found that the balance
 24 of hardships tips in favor of a plaintiff seeking an injunction which would 'merely prohibit the
 25 defendants from misappropriating the trade secrets of the plaintiff.'") (brackets deleted).

26 The balance of hardships also favors Waymo on the patent infringement claims. While
 27 Defendants may face some hardship in being enjoined from using the accused instrumentalities,
 28 "[o]ne who elects to build a business on a product found to infringe cannot be heard to complain if

1 an injunction against continuing infringement destroys the business so elected.” *Robert Bosch,*
 2 *LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1156 (Fed. Cir. 2011) (quoting *Windsurfing Int’l, Inc. v.*
 3 *AMF, Inc.*, 782 F.2d 995, 1003 n.12 (Fed. Cir. 1986)). This Court reached a similar conclusion in
 4 *Illumina*. -- F.Supp. 3d --, 2016 WL 4719269 at *11 (“Qiagen contends . . . that it would be
 5 unable to recoup its investment in the development and marketing of the GeneReader. But that is
 6 the price of its election ‘to build a business on a product found to infringe....’ The balance of
 7 hardships weighs in favor of an injunction.”) (quoting *Windsurfing*, 782 F.2d at 1003 n.12).

8 Moreover, Defendants would be free to use non-infringing alternative components in their
 9 business, such as the same third-party LiDAR systems that they had previously used before
 10 switching to Waymo’s patented technology. Merely reverting back to a non-infringing alternative
 11 is not a significant hardship under the law. *Douglas Dynamics, LLC v. Buyers Prod. Co.*, 717
 12 F.3d 1336, 1345 (Fed. Cir. 2013) (“If indeed Buyers had a non-infringing alternative which it
 13 could easily deliver to the market, then the balance of hardships would suggest that Buyers should
 14 halt infringement and pursue a lawful course of market conduct.”)

15 On the other side of the ledger, Waymo would suffer severe hardship from being forced “to
 16 compete against its own patented invention.” *Robert Bosch*, 659 F.3d at 1156. This is particularly
 17 true given the new market that Waymo is racing to commercialize. Thus, the balance of hardships
 18 strongly favors Waymo.

19 **IV. THE PUBLIC INTEREST SUPPORTS AN INJUNCTION**

20 The public interest also weighs in favor of enjoining Defendants, on both the trade secret
 21 claim and the patent claims. First, there is a strong public interest in vindicating both trade secret
 22 and patent rights — a public interest that far outweighs any public interest in *allowing* products
 23 that infringe on trade secret or patent rights. See *Vinyl Interactive*, 2009 WL 1228695 at *8 (“the
 24 third prong of the requested injunction, which simply enjoins Eddy from using Vinyl’s proprietary
 25 information, would further the public’s interest in prohibiting unfair competition.”); *Douglas*
 26 *Dynamics*, 717 F.3d at 1346 (holding that the public has a “general interest in the judicial
 27 protection of property rights in inventive technology” that “outweighs any interest the public has
 28 in . . . infringing products.”); *Illumina*, -- F.Supp. 3d --, 2016 WL 4719269 at *11 (“[A]bsent

1 any other relevant concerns...the public is best served by enforcing patents that are likely valid and
2 infringed.”) (quoting *Abbott Labs. v. Andrx Pharm., Inc.*, 452 F.3d 1331, 1348 (Fed. Cir. 2006)).

3 The public does have an interest in competition and consumer choice. But a preliminary
4 injunction against Defendants would hardly stifle competition or create a monopoly in the nascent
5 self-driving car market. Besides Waymo and Defendants, such corporate heavyweights as Apple,
6 Tesla, Ford, General Motors, and Nvidia are all pursuing self-driving car technology. See Jaffe
7 Decl. Exs. 54-56. And, of course, Defendants themselves would be free to continue pursuing this
8 technology as well, as long as they do not use Waymo’s trade secrets or patents to do so. Thus, an
9 injunction would be squarely in the public interest and would not disserve the goals of healthy and
10 vigorous competition.

11 CONCLUSION

12 For the foregoing reasons, Waymo respectfully requests that the Court enjoin Defendants,
13 together with their officers, agents, attorneys, and those persons who are in active concert or
14 participation with Defendants, from accessing, using, imitating, copying, disclosing, or making
15 available to any person or entity Waymo’s Asserted Trade Secrets, including but not limited to the
16 Asserted Trade Secrets as embodied in LiDAR systems that contain or are designed to operate
17 with the printed circuit board depicted in the schematic attached as Exhibit 1 to the Declaration of
18 William Grossman or any colorable variation thereof. Waymo further requests that Defendants be
19 enjoined from making, using, selling, or offering to sell devices that infringe claims 1 or 13 of
20 United States Patent No. 8,836,922 and claims 1 or 14 of U.S. Patent 9,285,464. Waymo also
21 requests that Defendants be compelled to return any and all Waymo confidential information in
22 their possession or control, including the 14,000+ documents unlawfully taken from Waymo by
23 Mr. Anthony Levandowski and his colleagues. Alternatively, Waymo requests an expedited trial
24 on all of the claims set out in its Amended Complaint. Should expedited discovery provide good
25 cause, Waymo respectfully reserves the right to expand the scope of its preliminary injunction
26 request.

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DATED: March 10, 2017

QUINN EMANUEL URQUHART & SULLIVAN,
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